TOO LIGHT? TOO HEAVY? TOO MEDIUM? THE 2D INFANTRY DIVISION AS A PLATFORM FOR DECISIVE OPERATIONS ON THE KOREAN PENINSULA

A MONOGRAPH
BY
Major J. Kevin Hendrick
Infantry



School of Advanced Military Studies
United States Army Command and General Staff
College
Fort Leavenworth, Kansas

First Term AY 97-98

Approved for Public Release Distribution is Unlimited

19980324 131

DTIC QUALITY INSPECTED 3

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

		· · · · · · · · · · · · · · · · · · ·			
1. AGENCY USE ONLY (Leave blank	18 December 1997	3. REPORT TYPE AND DATES MONOGRAPH	AND DATES COVERED		
4. TITLE AND SUBTITLE TOO Lie The 2d Infantry Du	ght? Too Heavy? Too M vision as a Platfam f	edum? 5. FUND or Decisive	ING NUMBERS		
Operations on the K	orean Peninsula				
6. AUTHOR(S)					
Major J. KEVIH H	ENDIZION				
7. PERFORMING ORGANIZATION N	IAME(S) AND ADDRESS(ES)		ORMING ORGANIZATION		
SCHOOL OF ADVANCED MILITARY STUDIES COMMAND AND GENERAL STAFF COLLEGE FORT LEAVENWORTH, KANSAS 66027					
9. SPONSORING / MONITORING AG	GENCY NAME(S) AND ADDRESS(E		NSORING / MONITORING NCY REPORT NUMBER		
COMMAND AND GENERAL S FORT LEAVENWORTH, KANS			NOT HEL OIT NOMBER		
11. SUPPLEMENTARY NOTES					
12a. DISTRIBUTION / AVAILABILITY	STATEMENT	12b. Dis	12b. DISTRIBUTION CODE		
DISTRIBUTION UNLIMITED					
13. ABSTRACT (Maximum 200 word	ls)				
SEE ATTACHED					
·					
*					
14. SUBJECT TERMS			15. NUMBER OF PAGES		
			16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT		
UNCLASSIFIED	UNCLASSFIED	UNCLASSIFIED	UNLIMITED		

ABSTRACT

TOO LIGHT? TOO HEAVY? TOO BALANCED? THE 2D INFANTRY DIVISION AS A PLATFORM FOR DECISIVE OPERATIONS ON THE KOREAN PENINSULA by MAJ J. Kevin Hendrick, USA, 60 pages

The purpose of this paper is to determine the utility of the 2d Infantry Division as a platform for decisive operations on the Korean Peninsula. Based on an unclassified North Korean campaign plan, a model CFC campaign plan was constructed that placed the 2ID into a role as the theater reserve. Using the doctrinal definition and purpose of an operational reserve, three missions were developed as likely. These missions were then quantified as decisive in nature, using both theory and U.S. doctrine. A force structure, based on J.F.C. Fuller's model of combat effects, is suggested as appropriate for conduct of these missions.

Three case studies from the Korean war were then conducted. These case studies all involved division sized operations that were similar in nature to the ones suggested for the 2ID. The vignettes were analyzed and used to quantify the linkage between tactical decisiveness, force structure, and the ability to generate combat effects. Each analysis yielded a slightly different model of decisive force structure. Once complete, the 2ID's force structure could be compared to the models developed.

Before final analysis, a rationale is presented as to the suitability of the heavy light division vice a standard heavy or light division to conduct decisive operations in the Korean theater. The conclusion is that the standard heavy or light division lacks either firepower or sufficient infantry to adequately deal with the Korean terrain and enemy. A heavy light mix seems to be the best compromise.

The current force structure of the 2ID is then compared to the combat effects shown to be necessary by the historical case studies. It is concluded that the structure of the 2ID is adequate to generate the effects necessary to conduct decisive operations in the Korean theater. Due to heavy dependence on rotary wing aircraft, it is recognized that good flying weather is a must if the division is to maximally exploit it's mobility. The 2ID is also hampered by the lack of sufficient rotary wing aircraft to move both air-assault battalions simultaneously and the inability of the Main Support Battalion to conduct self movement in one lift. Recommendations are made to address these limitations. The monograph ends with a statement that the organization of the 2ID is predicated upon the particular situation in Korea, it may not translate well to other parts of the world.

SCHOOL OF ADVANCED MILITARY STUDIES MONOGRAPH APPROVAL

Major J. Kevin Hendrick

Title of Monograph: Too Light? Too Heavy? Too Medium? The 2d Infantry Division as a Platform for Decisive Operations on the Korean Peninsula

Monograph Director

COL Douglas L. Tystad, MMAS

Director, School of Advanced Military Studies

Mulp J. Brokes, Ph.D.

Director, Graduate Degree Program

Approved by:

Accepted this 18th Day of December 1997

TABLE OF CONTENTS

		Page
l.	Introduction	1
11.	The Situation in Korea	3
111.	Decisive Action and Its Corresponding Force Structure	7
V.	Historical Case Studies A. EUSA Counter-Attack into the Naktong Bulge B. Breakout From the Pusan Perimeter C. The 1st Cavalry Division Exploitation From the Pusan Perimeter to Linkup with Xth Corps D. Historical Case Study Conclusions	16 24 28
V.	Doctrine and the Heavy Light Mix on the Korean Peninsula	36
VI.	Analysis of the 2d Infantry Divisions Force Structure	39
VII.	Conclusion and Recommendations	42
VIII.	Maps A. The Korean Peninsula B. NkPA Corps Zones C. The Pusan Perimeter D. Battle of the Naktong Bulge E. Penetration by the 1st Cavalry Division F. EUSA Pursuit Operations	45 . 46 . 47 . 48
IX.	Endnotes	. 50
Χ.	Bibliography	. 57

TOO LIGHT? TOO HEAVY? TOO BALANCED? THE 2D INFANTRY DIVISION AS A PLATFORM FOR DECISIVE OPERATIONS ON THE KOREAN PENINSULA

North Korea, the last Stalinist Nation in the world, faces the coalition between the United Nations and the Republic of Korea (ROK) across an uneasy demilitarized zone (See map A). With a penchant for secrecy, the worlds fourth largest standing army, and increasingly desperate domestic conditions, North Korea is a highly dangerous enemy. Their desire to reunite the peninsula by military force was recently commented on by General John H. Tilelli Jr., the current Commander in Chief, UN Forces, Korea: "As the North Korean regime continues to struggle for the economic and political survival of its system, it remains steadfast in its objective to dominate the Republic of Korea (ROK) by force of arms." Many in the U.S. defense establishment agree that the next U.S. foe on the large scale conventional battlefield is likely to be the North Korean Peoples Army (NkPA). Facing this threat is the Combined Field Command (CFC), a U.S./ROK military alliance which contains only one forward deployed U.S. division, the 2d Infantry Division (2ID).

The active army of the United States has ten divisions, six are classified heavy (infantry or armor), two as light, and one each as airborne and air-assault. Although the 2ID is classified as a heavy division, it differs from the standard heavy division in that it is a mix of both heavy and light forces. This organization dates back to 1971 when the 2ID became the only U.S. division assigned to the

Eighth U.S. Army (EUSA).² With a few variations, this mix of heavy and light forces has persisted until today. The purpose of this monograph is to determine whether or not this organization is a help or hindrance to the division's ability to conduct decisive operations against the NkPA.

As the largest fixed organization in the U.S. Army, a division normally depends on its controlling corps to provide it with non-organic forces required for a specific mission (i.e. artillery brigades, attack helicopter battalions or brigades, separate infantry or armor brigades, and combat service support assets).³

Lacking a U.S. corps to act as a force provider and enhancer, the maneuver organization of a singular forward deployed division becomes critical to mission accomplishment. In other words, a division forward deployed without a supporting corps must be preorganized for its most likely mission. This is the reason for the continuation of the unique heavy light organization of the 2ID. However, is this organization still valid, or is it time for a change?

In order to explore the suitability of the maneuver organization of the 2ID for conduct of decisive operations, this study will first explore the unique situation that is found on the Korean peninsula, and the probable uses of the 2d ID if committed as a singular U.S. division. It will next be determined if the probable missions are decisive in nature. In order to accomplish this the paper will define the term *decisive operations* using theory and current U.S. Army doctrine.

Concurrently, these definitions will lead to force design considerations. Historical case studies will then be conducted, one for each particular type of operation

that the 2ID may be expected to conduct. These studies will show the relationship between a decisive action, the force design, and the ability to generate certain combat effects of the executing unit. A rationale will then be presented for the 2ID's heavy light organization based on U.S. doctrine and theory. The study will next explore the decisive operations that are likely to be conducted by the 2ID and, based on its force structure, analyze its ability to generate the effects necessary for success. Finally, the paper will reach conclusions about the suitability of the division's maneuver organization to conduct decisive operations in the Korean theater.

THE SITUATION IN KOREA

The likelihood of a cross DMZ attack by the NkPA has not diminished since the truce that ended the Korean War in 1953. Many would argue that in the light of recent catastrophic events in the north, (i.e. drought, famine, and political isolation) that an attack is more likely than ever. But how is the NkPA likely to conduct such an invasion and what would its likely goals and objectives be? General Robert W. RisCassi, former CINC, CFC, stated,

"The North believes it must not repeat the errors of the 1st Korean War, the ROK must be conquered and seaports closed to reinforcements before the North loses the military balance of power. This imperative establishes the need for continuous offensive momentum." ⁵

In order to establish a working scenario that supports General RisCassi's statement this study will use the NkPA campaign plan outlined in the North Korean People's Handbook, published by the Battle Command Training Program

(BCTP), and Field Circular 100-2-99, North Korean People's Army, December 1986, as a model.

The NkPA is organized into eight conventional corps, four mechanized corps, one armored corps, one artillery corps, and one capital defense command. The four conventional corps currently located along the Demilitarized Zone (DMZ) are the "warfighting" corps of the NkPA, their mission is the annihilation of ROK forces north of Seoul. (See map B) The north will then use it's tactical exploitation forces of two mechanized corps to drive deep behind ROK defensive lines and set up blocking positions to cut off withdrawing or reinforcing units. These corps are most likely to be committed as separate brigades under the command and control of the four forward corps.

Once the forward ROK forces have been isolated, the NkPA operational exploitation forces, consisting of two mechanized corps, will then pass through the remnants of the CFC and drive deep into the south in order to secure entry points into the ROK which will preclude external reinforcement of the CFC. Once the peninsula is secure from outside reinforcement, the conventional corps will move south of Seoul to complete destruction of the CFC and consolidate their victory.

Located only twenty five kilometers south of the demilitarized zone (DMZ) is the capital city of Seoul, long recognized as the economic and political center of gravity for the ROK.¹¹ In order to protect the city, ROK forces can be expected to defend well forward to prevent or limit penetration of the DMZ.

Although the city would still be vulnerable to missile attack, a forward defense will shield the greater portion of the city from long range rocket and artillery fires. If the ROK defense is successful, the NkPA attack will be forced to culminate before Seoul can be threatened by conventional forces. Fighting a doctrine of active defense, the CFC will then have two options: 1) Counter attacks to restore the DMZ, or 2) a counter offensive into North Korea.

The 2ID is assigned to CFC and, under peacetime conditions, operates under the nominal command and control of the VI ROK Corps, part of the Third ROK Army (TROKA). This relationship is a function of peacetime positioning and should not be expected to continue in the event of war. In accordance with the Nunn-Warner report, which became law as a part of the 1990 defense appropriation bill, the ROK is expected to accept increasing responsibility for the defense of their country. In practical terms, Nunn-Warner requires the ROK to conduct initial close combat operations independently, hopefully defeating any North Korean attack prior to the arrival of additional U.S. ground forces.

Therefore, in the event of an attack upon the ROK by North Korea, the 2ID will most likely be placed in theater reserve, to await arrival of additional U.S. forces and integration into the EUSA.

The CFC approved a new campaign plan in 1993 that calls for rapid augmentation of EUSA by U.S. forces and the ability to employ them immediately upon arrival in theater. The forward deployed ROK ground forces will be aided by joint and combined U.S. and ROK airpower interdicting NkPA

ground columns. This is intended to give the ground defense the opportunity to stabilize while awaiting the arrival of U.S. forces.¹³

Due to the decreased force structure of the U.S. Army, as few as four U.S. divisions can reasonably be expected to deploy to the peninsula in the event of war. Not only is this a level far below what most experts believe is required, ¹⁴ but also their deployment is expected to take at least seventy-five days. ¹⁵ So, in the event of a surprise attack by the North, the ROK Army will be responsible for the conduct of the early close fight, a battle that may well spell the difference between life or death for South Korea.

If a North Korean surprise attack threatens to defeat the forward deployed ROK forces, the 2ID will probably be committed to combat as the theater reserve. As an operational reserve, their doctrinal purpose will be to conduct decisive operations against the NkPA. Based on the likely NkPA campaign plan the most likely mission to be assigned to the 2ID can be defined as one, or more, of three possibilities: 1) defeat of the tactical/operational exploitation forces, 2) create a penetration through the culminated forward corps defenses, followed by 3) an exploitation into the north.

The 2ID is the most lethal ground force currently located on the Korean peninsula. This is a function of its modernization and advanced C3I (Command, Control, Communications, and Information) capabilities. However, is their maneuver organization the optimum solution for these three proposed operations?

DECISIVE ACTION AND ITS CORRESPONDING FORCE STRUCTURE

The 1993 edition of FM 100-5 states that the offense is the decisive form of war. It further describes decisive victory as the capability to put overwhelming combat power on the battlefield to defeat an enemy guickly and with minimal casualties. 17 The 1997 draft of FM 100-5 clarifies the issue somewhat by stating that the concept behind the army's operational planning is battlespace dominance: control of the nature, scope and tempo of an operation. 18 Although this is a helpful definition for purposes of planning in that it describes the desired effects of an operation, it does not determine the nature of decisive action, that action which leads to a decision, either of a battle (at the tactical level), or a campaign (at the operational level). This chapter will determine a practical definition of the term decisive operations and a corresponding force structure that applies directly to the specific situation found in the Korean theater of operations. These products will be determined by combining the effects demanded by U.S. doctrine with military theory. Clausewitz and Jomini will provide the classical theoretical input while J.F.C. Fuller and Dr. James Schneider will give a more contemporary viewpoint.

Clausewitz and Jomini agree that the surest method of decisive action is the annihilation of the enemy forces. However, they differ somewhat in their philosophy of how best to achieve this annihilation. Fuller and Schneider also agree that destruction of the enemy army is a worthwhile tactical goal, but then claim that in today's modern theater of operations this classic battle of annihilation is becoming ever more elusive. Fuller espouses the defeat of the opposing commander's plan as the recipe for decisive battle, ¹⁹ while Schneider claims that in contemporary warfare the only truly decisive battle is the last battle of the war. ²⁰

Clausewitz states repeatedly that the destruction or defeat of the enemy is the primary objective of a fight.

"What do we mean by defeat of the enemy? Simply the destruction of his forces, whether by death, injury, or any other means--either completely or enough to make him stop fighting. ...the complete or partial destruction of the enemy must be regarded as the sole objective of all engagements. ...annihilation of the enemy is the primary purpose of battle. ...We do claim, however, that direct annihilation of the enemy's forces must always be the *dominant consideration*."²¹

Clausewitz thus believes that tactical success equals destruction and tactical success/successes are of paramount importance in the ability to successfully wage war.

Clausewitz defines the destruction of the enemy's forces as a reduction of strength relatively larger than one's own. This reduction of strength can take place either in the physical or moral domain of battle, with the moral the more important of the two.²² Clausewitz claims three elements to the concept of total victory: 1) the enemy's greater loss of material strength, 2) his corresponding loss of morale, and 3) his open admission of the above by giving up his intentions.²³ The method to this end is the maneuver of envelopment (see figure 1); he claims that without envelopment the ability to achieve great results in

battle are greatly reduced.²⁴ It is by envelopment that the offense overcomes the inherent strength of the defense, causing relatively greater force destruction, an ensuing breakdown of morale, followed by disorganization of the defeated army. The victor can then use the greatest tool of annihilation, the immediate pursuit.

The pursuit is Clausewitz's lodestone, the thing to be sought after a battlefield victory to ensure decisiveness: "Pursuit is the strategic means of exploiting victory, it culminates victory and, if successful, completes destruction of the enemy.²⁵ The more organization the victorious army retains in the form of uncommitted reserves, the greater their ability to launch a destructive pursuit. The force that is to conduct the pursuit is optimally of all arms, but pure cavalry is also acceptable.²⁶

As to the structure of the decisive force, Clausewitz concentrates on the three arms that were dominant in his day, ranking them in order of importance as infantry, artillery, and cavalry. He caveats this ranking with the statement that the use of all three, combined and coordinated, leads to a more complete and decisive use of them all.²⁷ The decisive force must contain a reserve, as Clausewitz believes that the first army to deplete itself of reserves has taken the first step to defeat.²⁸ To produce decisive results, this reserve is best organized containing all of the three primary arms so as to produce the maximum effects against the enemy, and is best employed against the enemy center of gravity, or it's *schwerpunkt*. In order to conduct an effective pursuit, further uncommitted reserves are called for, again, best formed of all arms.

Clausewitz defines decisive battle as the ability to cause more damage to the enemy force than are inflicted on the friendly force. This destruction is best accomplished by an enveloping maneuver which minimizes the advantages of the defense and causes maximum destruction and disintegration of the army. Defeat on the field of battle is followed by rapid and effective pursuit operations which complete destruction of, not only the enemy army, but their national will to wage war. The force to conduct these operations is best constructed of a mixture of the three primary arms, in such ratios as are determined by the situation and the terrain over which they must operate.²⁹

Jomini is not so far from Clausewitz as one might think. He also is an interpreter and practitioner of Napoleon's method of warfare; therefore the destruction of the enemy force is foremost in his mind. However, he denies that only battle is decisive,

"Battles have been stated by some writers to be chief and deciding features of war. This assertion is not strictly true, as armies have been destroyed by strategic operations without the occurrence of pitched battles, by a succession of inconsiderable affairs."

He also denies Clausewitz's call for envelopment as necessary to achieve decisive victory. To do this, he quotes a number of historical examples where either an attempted envelopment failed, or it was unneeded to defeat the opposing force. Jomini is quick to admit he does not discount maneuver, only points out that history points out that it is not always necessary to victory.³¹

Jomini also agrees with Clausewitz that defeat of the moral domain is of more import than defeat of the physical, although this moral defeat is most likely

a function of actual, or threatened, destruction of the physical. Although the two agree on this point, Jomini does not place the same emphasis on the importance of the immediate pursuit in order to push the defeated army into total disorganization. While Clausewitz continues to expound the importance of the pursuit as the follow-up to the moral defeat, Jomini simply states that whenever there is a retreat, a pursuit always follows. In three quick paragraphs the reader is informed that a retreat always gives the advantage to the pursuer and that there are three general principles of the pursuit: 1) best to pursue an army upon its flanks, 2) conduct the pursuit boldly, and 3) the concept of the bridge of gold is of little use.³² This attitude seems to suggest that the Jominian battle of annihilation is best decided upon the actual battlefield, not during subsequent operations.

Jomini also speaks of force structure as a function of the same primary arms as Clausewitz although he gives some concrete ratios as to the amount of cavalry to be effective.³³ He speaks of the primacy of the infantry but then agrees with Clausewitz: "...Without aid rendered by cavalry and artillery the infantry would be severely compromised." ³⁴ He is quite clear on the point that the purpose of the combination of the three arms is to overwhelm the enemy troops at the decisive point of the battlefield at the proper time and with the greatest amount of energy. ³⁵

In sum, Jomini believes in the concept of the battle of annihilation carried out by a force consisting of infantry, artillery, and cavalry acting in mutual support

and assistance. Although he admits to the importance of the pursuit, he describes the decisive battle as the action that actually takes place on the field of battle. He says the pursuit is merely an action prior to the next battle to be fought, either when the retreating army has been brought to bay, or has reached the point where they can offer further battle. Jomini claims the moral victory is the linchpin to decisive victory but denies that pursuit is necessary in order to complete annihilation. Despite these differences, it is still obvious that Jomini believes the battle of annihilation to be the most decisive form of combat.

J.F.C. Fuller has a somewhat more contemporary view of warfare in which he believes effects are the most important factor in waging war. "The grand-tactical object is the destruction of the enemy's plan, which destruction will so reduce his will to win that he must either surrender or accept terms of peace." ³⁶ Fuller's definition of grand-tactics speaks to the level of war that U.S. doctrine calls operational. At the tactical level of war, he recognizes the primary method of destroying the enemy's campaign plan is destruction of his tactical forces. Thus annihilation, although increasingly difficult to achieve on the modern battlefield, again becomes the vehicle for decisive combat at the tactical level. ³⁷ Like Clausewitz, Fuller stresses the importance of the pursuit, to the length that he claims that a proper army must have a particular type of force dedicated only to the task of pursuit.

One of Fuller's greatest gifts to contemporary warfare is his view on force structure. As a proponent of technology, Fuller does not recognize the primacy

of infantry, artillery, and cavalry, rather he defines the primary effects that each arm performs and says that the effect is the important thing, not the arm itself.

"Artillery, infantry, and cavalry are *not necessarily essential arms*, because there is not such a thing as an essential arm. Arms are but means towards an end, and these means are constantly changing. ...as regards structure, we arrive at the following conclusions: the structure of fighting force must be such that it will permit of the enemy forces being rapidly demoralized, disorganized, and destroyed, and simultaneously, prevent the enemy carrying out these acts. Three types of troops are required, and these I have called protective troops, combat troops, and pursuit troops. These form the three-fold structure of fighting force." ³⁸

In timeless fashion, Fuller describes the decisive tactical battle as the ability to destroy the enemy force, an effect that paralyzes the will of the enemy operational commander. This *tactical* action is fought by the combat troops who generate the demoralization, disorganization and destruction of the enemy force. If the enemy flees the battlefield, the pursuit troops give chase and continue the effects generated by the combat troops. The pursuit, although achieving operational goals, may be conducted as a tactical operation by a tactical force. The protecting troops ensure that the enemy is unable to achieve the same results against the friendly force.

Dr. Schneider is the originator of the theory of the distributed theater of operations, that armies no longer are capable of fighting one decisive, operational battle which will decide the outcome of the campaign or war. Instead decisive battle must be achieved against each of several independent armies within the theater.³⁹ These decisive battles must be waged along operational axes that support the distributed campaign plan.⁴⁰ In other words, for a tactical

battle to be decisive in nature, Schneider says that its successful conclusion must move the campaign plan toward completion along its particular operational axis.

All four theorists agree that the battle of annihilation is the single best method of reaching a tactical decision. This battle of annihilation may take place on a single field of battle, or it may be completed during a pursuit operation. However, as the Republic of Korea is a mature theater of operations, with a corresponding campaign plan, Schneider's definition of tactical decisiveness is also valid. Along with the ability to annihilate the enemy force, decisiveness on the Korean peninsula must also be seen as the ability to win battles that move the campaign plan toward completion. In certain cases, this may call for effects less than annihilation, such as blocking, creating a penetration, or the conduct of an exploitation. Both of these definitions, annihilation and campaign progression, meet the operational goal of dominating battlespace, as stated in the 1997 draft of FM 100-5.

The tactical tasks necessary to achieve the onward movement of the campaign plan depends on the plan itself. However, the three missions suggested for the 2ID are all valid mechanisms for what can be termed decisive operations. The destruction of the tactical and/or the operational exploitation forces can not only be seen as a battle of annihilation, but also destroys the NkPA ability to seal off the peninsula from CFC reinforcements, a key piece of the 1993 CFA campaign plan. An exploitation into North Korea may or may not

be a part of the campaign plan, but it is surely a branch or sequel which either completes annihilation or progresses the campaign. The task of conducting a penetration of the culminated NkPA forward corps defense is a tactical necessity prior to exploitation. As this is an enabling task and directly moves to the next decisive action, the exploitation, this too fits a Korea specific definition of decisive operations.

Now that the three proposed missions for the 2ID have been shown to be decisive in nature, it is necessary to determine the force required to prosecute each one successfully. Clausewitz and Jomini both speak of the effectiveness of combined arms operations, but they fall short when describing specific effects required for success. Fuller's concept of the three-fold fighting force fills in these effects required for the force to be successful. By combining these two concepts, a force capable of conducting decisive operations can be defined as: a combined arms formation capable of causing the enemy to be rapidly demoralized, disorganized and destroyed, while simultaneously preventing the enemy from carrying out these acts.

Although Fuller's model is of an operational force, a division is capable of generating the same combat effects, just to a lesser degree. In fact, for certain missions a division may need to possess only combat and protective troops.

The desires of the higher commander will determine whether or not the division must constitute pursuit troops. As a pursuit or exploitation is often an operational form of maneuver, an entire division may be required to act as pursuit troops for

a corps or larger unit. The next chapter will consist of three historical case studies that will validate this model as an appropriate tool to analyze the capabilities of the 2ID to conduct decisive operations as an operational reserve.

HISTORICAL CASE STUDIES

This chapter will conduct separate studies for each type mission that has been suggested as suitable for 2d Infantry Division to carry out as the theater reserve. In order that the studies most closely replicate the physical characteristics and terrain found on the Korean peninsula only vignettes from the war of position and maneuver that typified the Korean War from 25 June to 26 November 1950 will be used. Each vignette will be analyzed as to its decisive effects and force structure. The chapter will end with conclusions as to the relationship between a particular decisive action and the required force structure.

EUSA COUNTER-ATTACK INTO THE NAKTONG BULGE

After continuous combat since 5 July, 1950, the EUSA could no longer afford to withdraw, it had to hold or be driven from Korea. LTG Walker, EUSA commander, chose to establish a defensive perimeter generally along the Naktong river (see map C). Four beleaguered US divisions defended to the west, along the most dangerous avenues of approach, and six ROK divisions defended to the north. The 24th (US) Infantry Division (24ID) occupied the sector between the 25th (US) Infantry Division (25ID), to their south, and the 1st Cavalry Division (1CD) to their north.

The 24ID was overextended, defending over thirty-four miles of river front. This in spite of the then current doctrine that called for a 10,000 yard (less than 6 miles) frontage for a full strength U.S. division. The 24ID was grossly understrength, not only had it been roughly handled during the retreat to the south, but also peacetime reorganization had left its pre-war organization understrength by three infantry battalions, three regimental tank companies, and one heavy tank battalion. As of 5 August 1950, the division rated themselves at 53% combat effectiveness, by all accounts a more realistic rating was 40%.

The 24ID defended along the most dangerous of four likely lines of advance toward Pusan by the North Korean Army, across the Naktong bulge to the rail and road junctions at Miryang and on to Pusan. The commanding general of the 24ID, MG Church, believed it was more likely that the North Koreans would attack in the northern portion of his sector. To counter this, he concentrated the bulk of his division, the 21st Infantry Regiment and the 17th ROK Infantry, to the north. The south was lightly held by the 34th Infantry, while the 19th Infantry refitted vicinity Ch'angnyong and acted as the divisional reserve.

The 34th Infantry defended a frontage of 15,000 yards with the 3d Battalion forward and the 1st Battalion in reserve vicinity Kang-ni. Because of the huge frontages involved, there was an unoccupied gap of over two miles between I and L companies, and another of more than three miles between L

and K companies.⁴⁸ It was against these huge gaps that the North Koreans chose to attack.

By 4 August the North Korean 4th Division had concentrated its three line regiments in the vicinity of Hyopch'on, and was conducting reconnaissance against the 34th Infantry defenses along the Naktong. The 4th Division was a battlehardened formation that had played a key role in the capture of Seoul. It was commanded by Major General Lee Kwon Mu and had a strength of approximately 7000 men, with 1500 in each Infantry Regiment. At midnight, 5 August, the 4th Division attack across the Naktong began, exploiting the gap between I and L companies, 34th Infantry, and creating a lodgment which held against local counterattacks conducted by 1st Battalion of the 34th Infantry. The 4th NkPA division continued to reinforce the bridgehead during the night of 6 August. So

Counterattacks conducted by the 19th Infantry and elements of the 34th Infantry again failed to reduce the North Korean lodgment on the 7th of August. Faced with an increasingly grave situation, MG Church appealed to EUSA for help. Rather than employing an Army directed reserve, LTG Walker chose to reinforce the 24th ID. He ordered the 9th Infantry Regiment detached from the 2d Infantry Division and attached to the 24th as of 7 August. The same day, under the command of COL Hill, the 9th Infantry counter-attacked into the Naktong bulge with little success.⁵¹

On 10 August, MG Church placed COL Hill in command of all troops in the Naktong Bulge (9th, 34th, 19th Infantry Regiments, the 1st Battalion of the 21st Infantry, and supporting artillery). This divisional sized force was named Task Force Hill and ordered to restore the Naktong River line on the morning of 11 August. Meanwhile, between 8 and 11 August, the North Korean 4th Division had built a number of underwater bridges across the Naktong, allowing the remainder of the division and an undetermined number of T-34 tanks to move into their ever expanding bridgehead. By the unsuccessful conclusion of TF Hill's attack on the 11th of August, there were clear signs that 4th Division was beginning an enveloping movement in the far south of the 24ID sector.

Again facing potential disaster, LTG Walker attached the 27th Infantry Regiment to 24ID, choosing to reinforce rather than use an operational counterattack force. The 27th Infantry, the Wolfhounds, counter-attacked against a fresh North Korean push on 14 August, containing the advance, but unable to mount an effort sufficient to restore the river line. On the night of the 14th, strong North Korean attacks forced penetrations of the main U.S. line which were unable to be contained by TF Hill.

The situation on 15 August was grave. Although multiple NkPA divisional attacks threatened along the entire length of the Pusan Perimeter, LTG Walker knew the situation in the Naktong Bulge was the most serious. Finally convinced that the entire 4th NkPA Division was across the river, LTG Walker committed his last remaining reserve to the 24ID.⁵⁶

The 1st Provisional Marine Brigade was attached to the 24ID on 16

August. The most robust combined arms team available to the Eighth Army, this brigade was comprised of the 5th Marine Regiment, the 1st Marine Air Wing, a 105mm artillery battalion from the 11th Marines, and a heavy tank company armed with M26 medium tanks.⁵⁷ Anxious to resolve this serious threat to the integrity of the Pusan Perimeter, LTG Walker ordered an attack as early as possible on 17 August to destroy the 4th North Korean Division and restore the line. Unfortunately, the night of 16 August, the 4th Division renewed their attacks, gaining ground against the 2d Battalion of the 9th Infantry.⁵⁸

The U.S. situation was growing more and more serious; unknown to the U.S. forces however, the 4th North Korean Division was also in desperate straights. After eleven days of hard combat they were out of food, very low on ammunition, and their desertion rate was approaching 40 percent.⁵⁹ This situation set the conditions for the U.S. counter-attack that would ultimately prove successful.

The plan to destroy the 4th Division was a frontal attack by four infantry regiments abreast. (See map D) The 5th Marines, being the most robust force, with three full battalions and a tank company, had the lion's share of the terrain to seize; they would attack in the south. The 9th Infantry was to seize Cloverleaf hill, a piece of key terrain that would support the 5th Marine assault in the south. The badly battered and understrength 34th and 19th Regiments were to attack in the north along very narrow frontages.⁶⁰

At 0735 on 17 August, artillery and close air support (CAS) preparatory fires began to fall on the Obong-ni ridge in support of the 5th Marines attack. Using Marine Corps air attacks to good effect the 2d Battalion, 5th Marines attacked frontally. The 9th Infantry concurrently seized Cloverleaf hill without great difficulty. From this position they were able to lend fire support to 2d Battalion, 5th Marines who were still battling to gain the crest of Obong-ni ridge. It was at this point that the first use of tanks occurred by the North Koreans as four T-34s clanked out to meet the advancing marines. U.S. Marine Corps M-26's made quick work of the enemy, destroying three in quick order, the fourth escaping to the rear. As night fell, the marines, still short of their objective, formed a perimeter for the night. The 34th and 19th Regiments had also made progress, but with heavy casualties. At 0230 that night the marines repulsed the last attack mounted by the 4th Division.

The morning of 18 August, the 3d Battalion, 5th Marines, passed through the 2d Battalion, and, with supporting fires from the 9th Infantry, pushed the North Korean defenders off Obong-ni ridge. They immediately continued the attack to the northwest in concert with pushes by the 34th and 19th Regiments. The back of the 4th Division had been broken and they began a general retreat. 4th Division soldiers, their morale clearly broken, were repeatedly strafed by Marine close air throughout the afternoon. By the evening of 18 August it was clear that for the first time during the Korean War, the enemy had suffered a decisive defeat. The 4th Division had lost virtually all of its equipment and

weapons and had suffered at least 50% casualties overall. The three line regiments had been reduced from strengths of 1500 to around 300.⁶⁴ The penetration had been defeated, the crisis was over.

The NkPA missed a golden opportunity to exploit the bridgehead that had been gained by the 4th Division attack. Had they reinforced the success they were experiencing in the Naktong Bulge, pushing additional forces into the bridgehead, they would have likely ruptured the line and captured Pusan, effectively winning the war. Why did they not do so?

Although no hard data exists, it can reasonably be assumed that the NkPA's campaign plan had outlived its usefulness. Facing long supply lines, a toughening resistance by the UN forces, great difficulties in communications between their forces, and President Kim II Sung's desire to capture Pusan by 15 August, the NkPA plan was reduced to divisional attacks along the entire perimeter. They made no provisions to reinforce success, so they were unable to exploit it when the situation presented itself.

Although the 24ID was ultimately successful in conducting a battle of annihilation against the 4th NkPA division, what if the NkPA had reinforced the success gained early in the battle? Was the 1st Marine Brigade, acting as an operational reserve, capable of generating the effects necessary to defeat a penetration? Using their operation against the 4th NkPA division as a model, and assuming a favorable force ratio, the answer is yes.⁶⁶

The robust combined arms nature of the Marine Brigade formed the basis for the effects they were able to generate against the 4th NkPA division. The 5th Marine Regiment, and their attached tank company, constituted their combat troops. They conducted direct combat operations against their enemy, causing enough destruction so as to demoralize the North Korean soldiers and cause their retreat. During the direct fight the combat troops fought under the protection of their organic artillery, mortars, and air support. Again, assuming a favorable force ratio, these two forces, combat and protective, were capable of generating the required effects to destroy an enemy penetration.

As the mission given the marines was to restore the Naktong river line they were required to constitute a pursuit force. Although they had no dedicated reserves, their battalions in direct contact retained enough combat power and agility to transition from the combat to the pursuit role. As the 4th NkPA division began it's headlong retreat across the Naktong, they were pursued by Marine Corps fighters, who continued the effects of destruction, by repeatedly strafing the fleeing troops. The air sorties were quickly followed by the infantry and tanks, exerting direct pressure and the effects required to complete destruction of the 4th NkPA division.

This case study shows that the minimum requirements to generate the effects necessary for the successful destruction of a penetration are combat and protecting troops. These troops must be arrayed by the local commander so as to achieve a favorable force ratio. If the mission requires a follow on offensive

operation, such as the restoration of the FLOT (Forward Line of Troops), then a pursuit force must be constituted.

BREAKOUT FROM THE PUSAN PERIMETER

The landing of the Xth US Corps at Inchon on the 15th of September, 1950, was essentially enabled by the successful defense of the Pusan Perimeter, where, for six weeks, the EUSA had fixed the NkPA in position. Now that the landing had been accomplished the EUSA was to break through the NkPA defense and exploit to the north, pinning the NkPA in a classic hammer and anvil maneuver.

The night of 13 September, the 1st Cavalry Division (1CD) received

Operations Plan 19-50 from EUSA, which gave the concept of the 1CD actions
that would lead to the breakout from the Pusan Perimeter. The 1CD, along
with the 1st ROK Division, was to conduct a penetration of the NkPA defense,
making the way for the 24th ID to exploit to the north along the Taegu-KumchonTaejon-Suwon axis. The remaining elements of the EUSA were to conduct
holding attacks until the 24th Division could complete its passage through the
1CD. This would ensure two things, 1) the NkPA would be unable to move
forces to counter the Xth Corps landing at Inchon, and 2) they would be unable
to reinforce the NkPA 3d Division, the force opposing the 1CD.

The 1CD planned to conduct this attack with the 8th Cavalry and the 5th Infantry Regimental Combat Team (RCT) attacking abreast, the 5th Cavalry following and supporting the 5th RCT, securing its initial object and allowing the

infantry to drive to deeper objectives. The 7th cavalry was to trail the main body, destroying all bypassed enemy.⁶⁹ This would open a corridor sufficient to pass the 24th Infantry Division through to the north-west.

The maneuver organization of the 1CD for this operation is found in figure

1. As is evident from the organization, the 1CD was task organized for success, with twelve infantry battalions and two tank battalions, each containing 60 to 69 tanks. All of these tanks were medium tanks: two companies of M4A3's, one company of M26's in the 70th, and four companies of M46's in the 6th Tank Battalion. Together with the organic artillery assigned to the division, the 1CD was the strongest maneuver organization inside the Pusan Perimeter, perhaps on the entire peninsula. They were deliberately organized to bring massive combat power on a narrow front in order to penetrate and hold a large enough break in the NkPA lines to pass the 24ID to the northwest.

5th Cavalry Regiment Division Control
A Co/70th Tank Bn(M4A3) 70th Tank Bn(-)
7th Cavalry Regiment 6th Tank Bn (M46)(attached)
B Co/70th Tank Bn(M26)
8th Cavalry Regiment
C Co/70th Tank Bn(M4A3)
5th Infantry Regimental Combat Team (Attached)

Figure 1⁷⁰

LTG Walker had specifically requested to begin his attack the day after the Inchon landing, believing the news would lift the morale of the UN troops,

and produce a corresponding decrease in the morale of the defending NkPA.

Unfortunately, although UN troops learned about the landing immediately, the

North Koreans were simply not told about Inchon, so they fought on with their

customary tenacity. As such, after three days of bitter fighting, the only

significant progress made by any EUSA unit were two regiments of the 2ID along the lower Naktong.⁷¹

The 1CD began operations as it had first planned. The attached 5th RCT was the divisional main effort and directly supported by the 6th tank battalion. It's mission was to seize Hill 268, a piece of key terrain that dominated the town of Waegwan to the Southeast. This dominant terrain was defended by an estimated 1200 soldiers of the 3d NkPA division, and was supported by an unknown number of tanks. Hill 268 also represented the flank of the enemy II Corps, if seized it would turn their flank, making the entire corps defense untenable. (See map E)

On 16 September the 2d Battalion, 5th RCT attacked along the Regimental axis, making small gains, while the 8th Cavalry, on their right, quickly seized Hill 570.⁷³ The 8th Cavalry was now in a strong position to both secure the 5th RCT's right flank and support their attack with direct fire. On the evening of the 17th the 3d Battalion joined the 2d Battalion effort, while the 1st Battalion prepared to join the fight on the 19th.⁷⁴ The morning of 19 September, the 5th RCT launched a full regimental attack against Hill 268, with the 5th and 7th Cavalry Regiments protecting their left flank.⁷⁵

By nightfall the 3d Battalion, 5th RCT was on Hill 268, locked in a vicious fight with the remnants of a dug in North Korean regiment. This fight would continue throughout the night. By the morning of the 20th the 2d Battalion had captured Hill 121, only one mile from Waegwan, and the 1st Battalion had moved to the northwest, engaging yet another enemy position. Three flights of F-51's, dropping napalm and rockets, enabled the 3d Battalion to finally overrun the enemy bunkers on Hill 268. A few hours later, at 1440 the 1st and 2d Battalions of the 5th RCT linked up in the town of Waegwan and pushed through a minefield being laid in front of the town. As the 5th RCT passed through Waegwan, the NkPA 3d Division broke and began a panic stricken retreat. The 3d NkPA Division's right flank had been crushed, and the II NkPA Corps position made untenable. The way was clear to pass the 24th Infantry Division and transition the EUSA to the exploitation role.

There were many reasons for the success of the 1CD in the penetration of the NkPA defenses, not the least of which was the attrition and exhaustion that had been visited upon the NkPA formations since the opening of the war in June. However, the most important factor in its success was the organization given to it by the EUSA. Already comprised of three Infantry Regiments and the 70th tank battalion, they were heavily reinforced by the 5th RCT and the 6th Tank Battalion, the only M46 formation on the peninsula. The 1CD possessed the overwhelming combat troops required to generate the combat effects necessary

to defeat the enemy quickly and with minimal casualties, the effects demanded by the 1993 version of FM 100-5 for decisive victory.

The purpose of the 1CD's attack was to enable the forward passage of the 24ID into the exploitation. As such, the primary question is, was the 1CD properly organized to complete this mission? Their success provides the obvious answer, but a lack of mental agility prevented them from launching an immediate pursuit once the breakthrough was accomplished. From the EUSA down to the division, no one seemed to recognize the possibility that the 1CD would meet with such success that they could rapidly transition to the pursuit. However, within the division, both the 5th and 7th Cavalry Regiments (minus 2d Battalion, 7th Cavalry), had been only lightly engaged. Both units, combined arms formations, could have been used to conduct an immediate exploitation or pursuit. In fact, during the exploitation to Osan, the 7th Cavalry fulfilled this function.

This penetration shows that a combined arms force, concentrated against a relatively narrow front will have a high probability of success. The force requires at least close combat and protecting troops, and should give consideration to forming a sizable combined arms reserve to act as an exploitation/pursuit force in the event of exceptional success.

THE 1ST CAVALRY DIVISION EXPLOITATION FROM THE PUSAN PERIMETER TO LINKUP WITH XTH CORPS

On 22 September 1950 a very excited LTG Walker informed General of the Army MacArthur of the dissolution of the NkPA at the Pusan Perimeter. After

their conversation MacArthur was left with no doubt that the North Koreans had collapsed and that a great opportunity lay before the UN forces. Later that day LTG Walker issued the following order:

"Enemy resistance has deteriorated along the Eighth Army front permitting the assumption of a general offensive from present positions. In view of the situation it is mandatory that all efforts be directed toward the destruction of the enemy by effecting deep penetrations, fully exploiting the enemy weaknesses, and through the conduct of enveloping or encircling maneuver [to] get astride enemy lines of withdrawal to cut his attempted retreat and destroy him."

The original I Corps plan called for the 1CD to cross the Naktong River and then follow the 24ID in the exploitation toward Kumch'on and Taejon. Due to the shock brought about by the violent destruction of the 3d NkPA division and the subsequent unhinging of the II NkPA Corps, the 1CD was in a position that would allow them to conduct a simultaneous exploitation to the east of the 24ID toward Sangju. Even though the 1CD was severely battered from its battle of 16-20 September, LTG Walker could not resist the opportunity to regain the glory lost during the EUSA's retreat to the south.

Before an exploitation could take place, a divisional crossing site had to be established across the Naktong river. MG Gay assigned this mission to the 7th Cavalry Regiment. The 2d Battalion had been so badly shattered in the breakout operations that it had been withdrawn to EUSA reserve status to reconstitute. This left the 7th Cavalry Commander, LTC Harris, with two battalions to accomplish his mission. The 3d Battalion, 7th Cavalry was reinforced with two motorized batteries of the 77th Field Artillery Battalion (FAB)

and seven M4A3 tanks of the 70th Tank Battalion and designated Task Force (TF) Lynch. The 2d Battalion was designated TF Witherspoon.⁸⁰

LTC Lynch was ordered to seize the crossing site at the town of Sonsan, some fifteen miles distant. He was instructed to stop only if he met "determined resistance". He jumped off at 0800 on the 22d of September. Enroute to Sonsan, he received amended orders that sent him to seize the ford at the town of Naktong. Naktong not only had a better road to Sagju, it reportedly possessed an underwater bridge that had been constructed by the NkPA. Lynch arrived at Naktong at 2200 hours, some 35 miles beyond friendly lines.⁸¹

It was at Naktong that TF Lynch first met any sizable NkPA force. A convoy of six trucks and approximately 400 North Korean soldiers were discovered attempting to escape across the underwater bridge. After a furious assault by the TF's two tank platoons, in which six enemy tanks and some 200 soldiers were killed, TF Lynch controlled the town of Naktong. The U.S. troopers had captured two serviceable T-34 tanks, fifty trucks (some still bearing U.S. markings), and ten artillery pieces that had been abandoned on the east side of the river.⁸²

TF Witherspoon passed through TF Lynch the morning of 23

September and advanced ten miles to the abandoned town of Sangju.

Meanwhile TF Lynch rested while the engineers emplaced a ferry system capable of moving tanks across the Naktong. As darkness fell, TF Lynch moved

out from its bridgehead. By 0600 on the 24th they had linked up with TF Witherspoon in Sangju.⁸³

In order to gain space to accommodate the remainder of the 1CD on the west side of the Naktong, the 7th Cavalry occupied the town of Poun, some thirty miles from the bridgehead. Simultaneously, MG Gay began moving the division across the river by a meticulous schedule of ferry assets and use of the underwater bridge. As the division moved across the river they staged along the road between Sangju and Poun and prepared to race to the north. By the 25th the division was prepared to begin exploitation operations.⁸⁴

MG Gay believed he had an opportunity to drive to the north, much further than his assigned objective of Sangju. He could possibly drive as far as Osan, where he could link-up with elements of the Xth Corps. This plan was at odds with the I Corps plan which called for the 24ID and the 1CD to occupy a line designated as the Waegwan-Taejon Line. This line would complete encirclement of the entire NkPA that was engaged along the Pusan Perimeter. (See map F) As MG Gay's exploitation would severely weaken the Waegwan-Taejon Line, I Corps refused permission. With a once in a lifetime opportunity of deep exploitation before his eyes, MG Gay bypassed I Corps Headquarters and went directly to LTG Walker. The morning of 26 September Walker gave his OK for the 1CD to proceed northwest towards Osan, if possible, effecting linkup with Xth Corps.⁸⁵

MG Gay planned to use TF Lynch to spearhead the division drive from Poun to Chonju, to Chonan, to Pyongtaek, to Osan, a road distance of 106 miles. The 8th Cavalry Regiment would follow the 7th Cavalry to Chonan where it would turn to the north and seize the town of Ansong. The 5th Cavalry would follow as far as Chonan and Chochiwan, where it would halt, and face to the south, securing the division's rear. This would link the division with elements of the 7th Infantry Division (7ID) vicinity Osan, and place the division in an elliptical perimeter along the main road to Seoul. 86

The 7th Cavalry moved out of Poun at 1130, 26 September, with TF Lynch in the vanguard. By all accounts the move was a milk run for the entire day. In fact, at 1730 the TF's tanks were in danger of running out of fuel because the fuel trucks had inexplicably been left behind. Fortunately, a quantity of five gallon fuel cans were found in some of the trucks in the forward portion of the convoy. A North Korean convoy then blundered into the TF and enough gas was discovered to completely refuel the thirsty tanks.⁸⁷

As it grew dark, LTC Harris instructed LTC Lynch not to stop, but to continue the advance with his headlights burning. Numerous North Korean units were bypassed, but not engaged. At 2030 the main Seoul-Taejon highway was reached, and as the TF turned to the north they finally began to encounter organized enemy.⁸⁸

The lead element of TF Lynch, Lieutenant (LT)Baker's platoon, advanced through the town of Chonan at least an hour ahead of the TF main body. In his

rush to gain ground he bypassed a number of strong NkPA units that the main body would have to deal with that night. At 2226, 26 September, LT Baker completed the unofficial link-up between EUSA and Xth Corps, he had traveled 106.4 miles in eleven hours.⁸⁹

Meanwhile, the main body of TF Lynch became embroiled in a battle with ten T-34 tanks that had been bypassed. The battle raged for several night time hours as the tankless 7th Cavalry was forced to use handgrenades, bazookas, direct fire artillery, and even gasoline cans to destroy seven of the ten North Korean tanks. LTC Harris wisely decided to lager for the night. 90

After daylight on the 27th, TF Lynch hunted down and destroyed the remaining three T-34's left over from the previous night's battle. ⁹¹ They then proceeded cautiously to Osan. A short time later, MG Gay received the following message: "Contact between H Company, 21st Infantry, 7th Division, and forward elements of [7th Cavalry] established at 0826 hours just north of San, Korea". ⁹² The linkup between the two UN forces was now official. By noon the 8th Cavalry arrived at their objective vicinity Ansong, and the 5th Cavalry was protecting the division rear. The 1CD exploitation was complete. ⁹³

Although the division accomplished it's mission of effecting linkup with the Xth Corps, the overall purpose of encircling and destroying the NkPA along the Waegwan-Taejon Line had failed. LTG Walkers decision to remove the 1CD so weakened the line that a huge number of North Korean soldiers were able to

escape to the north. The estimates for numbers allowed to escape range from 25,000 to 40,000.⁹⁴

In an attempt to complete the destruction of the escaping NkPA, General MacArthur decided to conduct a general pursuit. This pursuit ultimately involved the invasion of North Korea, bringing China into the war and prolonging the conflict until 1953. Had the greater part of the NkPA been trapped and destroyed along the Waegwan-Taejon Line, the invasion of North Korea may have proved unnecessary.

Although this action did not result in the destruction of the fleeing NkPA, it does give the force attributes of a division acting as operational pursuit troops. In order to continue the effects of demoralization, disorganization, and destruction of the retreating enemy, the division requires three attributes. A combined arms organization possessing near one hundred percent mobility, overwhelming firepower, and the ability to provide self protection and self sustainment in deep maneuver operations.

The need for near one hundred percent mobility is quantified by the possibility of great distances able to be transversed in the pursuit, note that TF Lynch traveled over 100 miles in less than twenty-four hours. The lack of mobility would severely hamper the ability of a force to conduct the deep maneuver that typifies an exploitation or pursuit. Overwhelming firepower is a necessary component to continuing the demoralization, disintegration, and destruction of the enemy.

The ability to protect and sustain itself are both functions of protecting troops. When moving toward a deep maneuver objective, as demonstrated by the 1CD, indirect fires are especially important as a function of protection. Both artillery and tactical air are capable of interdiction of enemy forces that threaten the exploiting force, either by destruction of the enemy or lessening his combat power prior to contact with the exploiting ground force. Self sustainment is especially important as modern forces cannot rely on the ability to forage for the amounts of fuel and repair parts needed to maintain tempo.

HISTORICAL CASE STUDY CONCLUSIONS

These three case studies approximate the three likely missions of the 2ID as an operational reserve. Based on analysis of the force structure of the executing unit, the following conclusions can be made: 1) To destroy a penetrating force both close combat and protecting troops are required. If the unit is required to restore the FLOT, they will require pursuit/exploitation troops.

- 2) To successfully conduct a penetration both combat and protecting troops must be massed on a narrow front, gaining favorable force ratios that allow a quick and violent penetration. The unit conducting the penetration should be prepared to transition immediately to the exploitation if the opportunity arises.⁹⁵
- 3) In the exploitation role a unit requires near one hundred percent mobility, overwhelming firepower, and the ability to provide self-protection and self-sustainment in deep maneuver operations.

DOCTRINE AND THE HEAVY LIGHT MIX ON THE KOREAN PENINSULA

Before the force structure of the 2ID can be analyzed against the combat effects found necessary in the last chapter, it must be determined whether or not a standard heavy or light division could more effectively carry out the mission of the 2ID. This chapter will conduct an analysis of terrain, enemy threat, and U.S. doctrine as to the effects necessary to conduct decisive operations in the Korean theater. The results of this analysis can then be used to compare the relative strengths of the standard divisions, vice the heavy light division, for tactical effectiveness in this unique theater of war.

According to FM 90-6, the Korean peninsula is generally characterized as mountainous. ⁹⁶ However, Korean terrain is an atypical mountainous region. In the western half of the peninsula, where the 2ID is deployed, the terrain is notable for its numerous valleys, generally running north to south, broken by isolated ridges and mountains. These ridges are characterized by their precipitous rise and extremely steep slopes. ⁹⁷ They were used to great advantage by both the NkPA, and later the Chinese, as march routes for the purposes of both infiltration and turning movements during the Korean War. ⁹⁸ It is likely the current NkPA non-motorized infantry divisions will attempt to use them in the same fashion.

The NkPA campaign plan discussed in chapter one depends on the use of their mechanized corps as the mechanism for decisive action. The effective use of these forces depends on the maneuver space afforded by the valleys of

the western approaches to Seoul. Based on this scenario, the valleys become the decisive terrain of the next Korean War.

It has long been an issue whether the control of a mountainous region depends on control of the valleys or the high ground. Jomini, a very practical theorist, conducted historical analysis on this problem and concluded that although the control of the valleys is the key to dominating a mountainous region, a key principle of mountain warfare must be, "...not to risk one's self in the valley without first securing the heights". PM 90-6 also states that the decisive battle on mountainous terrain depends upon control of the dominating heights. The ability to control the high ground thus becomes highly important to the successful conduct of decisive operations. It is specifically for this type of fighting the 2ID is organized.

The current maneuver structure of the 2ID consists of three brigades. The 1st and 3d Brigades are each composed of two M1A1 battalions and one mechanized infantry battalion. The 2d Brigade is a light heavy mix, with one battalion of mechanized infantry and two battalions of air assault infantry. The heavy brigades are designed for direct combat and destruction of the NkPA mechanized and armored forces. These brigades possess extremely heavy fire power and unparalleled armor protection. However, with an extremely limited number of infantrymen available in their mechanized battalions they are unable to control the high ground that dominates the maneuver corridors of Korea. ¹⁰¹ It

is the capability of the air-assault battalions that allows the division to control the high ground, enabling the heavy brigades to defeat the NkPA mechanized corps.

FM 71-100 states that the goal of heavy light forces is to optimize both forces to defeat the enemy by providing commanders many flexible options. 102

The assignment of the two air-assault battalions to the 2ID provide the commander the flexibility to overcome the problems he will face dominating the heights that overlook the decisive valleys. Using the great mobility of rotary wing aircraft, the air-assault battalions are capable of air-assaulting directly on the ridges and providing security for the heavy forces operating in the valleys. In this role the air-assault troops assume the role of protecting troops; allowing the heavy brigades to fight the NkPA heavy forces in the valleys without disruption from the NkPA infantry, who also desire to control the heights. It is this protecting function of the air-assault battalions that quantifies the doctrinal need for heavy light forces in the Korean theater.

The heavy division combines the firepower, speed, and shock effect of armor with the speed and ability to fix enemy, and hold terrain of the mechanized infantry. However, their ability to maneuver in close terrain is severely restricted, and they lack the numbers of dismounted infantry required to control the important Korean ridgelines. The light division can control the heights, but lacks the organic firepower to destroy the NkPA mechanized corps. The specific tactical problem presented by the situation in Korea seems to demand a special heavy light mix, but, is the particular mix of the 2ID the optimum solution for the

generation of the combat effects shown necessary for the successful prosecution of the three decisive missions?

ANALYSIS OF THE 2D INFANTRY DIVISION'S FORCE STRUCTURE

The case studies conducted in chapter three establish the linkage between the combat effects generated by force structure and the accomplishment of three particular missions. Chapter four presented additional factors that show a heavy light mix is necessary for a singular division to conduct decisive operations in Korea. Analysis can now be made as a direct link to the first four chapters and the ability of the current structure of the 2ID to be successful in any of the three missions likely to be assigned to it as an operational reserve.

As earlier discussed, the model that has been built throughout this paper is one that stresses the effects a unit can generate on the battlefield. The three effects that have been determined to define the total fighting force are functions of combat, protection, and exploitation/pursuit. Historical case studies from the Korean war show that each type mission requires somewhat different effects for success. These effects will now be directly compared to the 2ID's maneuver structure.

To successfully block an enemy penetration requires the effects of protecting troops and combat troops. The 2ID's primary combat troops are the two heavy brigades, combined arms organizations that are well suited to defeat a

penetrating mechanized or armored formation. The heavy brigades will fight under the protection of the aviation brigade and the division artillery (DIVARTY). The DIVARTY is capable of not only adding to the firepower of the heavy brigades, but negating the effects of NkPA artillery through counterfires. Depending on the specific piece of ground the battle is to be fought on, the air-assault battalions can act as close combat troops, holding key terrain in the main battle area, or as protecting troops, isolating the battlefield by securing the ridgelines. Depending on the size of the enemy force to be destroyed, the division may, or may not have the capability to restore the FLOT. This will depend on the situation and the higher commander's intent.

In order to conduct a successful penetration it has been shown that both protecting and combat troops are needed. If possible, an exploitation force should be established, which is prepared to conduct an immediate exploitation if the opportunity presents itself. In this mission the 2ID will again fight under the protection of it's DIVARTY and aviation brigade. The heavy brigades, possessing the ability to breach obstacles under armor protection while, at the same time, massing firepower on the defending unit, are the major component of the combat forces. The air-assault battalions use vertical envelopment to eliminate the flank positions that overlook the penetration zone. This has the effect of isolating the zone of penetration so the heavy forces can concentrate on the close fight. The commander has the option of arraying forces so that an

immediate exploitation force can be formed. A heavy brigade task force, organized as a combined arms team, would be especially suited for this mission.

Generally, the 2ID possesses the functions that allow it to operate as an operational exploitation force. The heavy maneuver brigades are 100 percent mobile. The air-assault battalions, using the mobility of rotary wing aircraft, are capable of rapidly seizing the high ground in front of the advancing heavy brigades. The self propelled artillery and MLRS of the DIVARTY provide indirect fire support, while the aviation brigade, using its attack helicopters and division cavalry squadron, is capable of providing all round security for the advancing division. The divisional engineer brigade is organized to overcome problems with poor roads and bridges.

There are only three limiting factors on the division's mobility, two are rotary wing related, the other deals with sustainment. High winds and poor visibility are factors which cause the grounding of rotary wing aircraft. As both weather effects are not uncommon on the Korean peninsula, good weather is a prime consideration when the rapid seizure of high ground by air-assault is required. The lift capability of the division is only adequate to lift one air-assault battalion at a time, although tactical solutions are available to mitigate this problem, it is none-the-less a limiting factor. The 2ID's Main Support Battalion (MSB) is only fifty percent mobile, which means the division support area (DSA) cannot be moved as one complete entity. This severely limits the amount of fuel and repair parts that the division can carry during deep maneuver operations.

CONCLUSIONS AND RECOMMENDATIONS

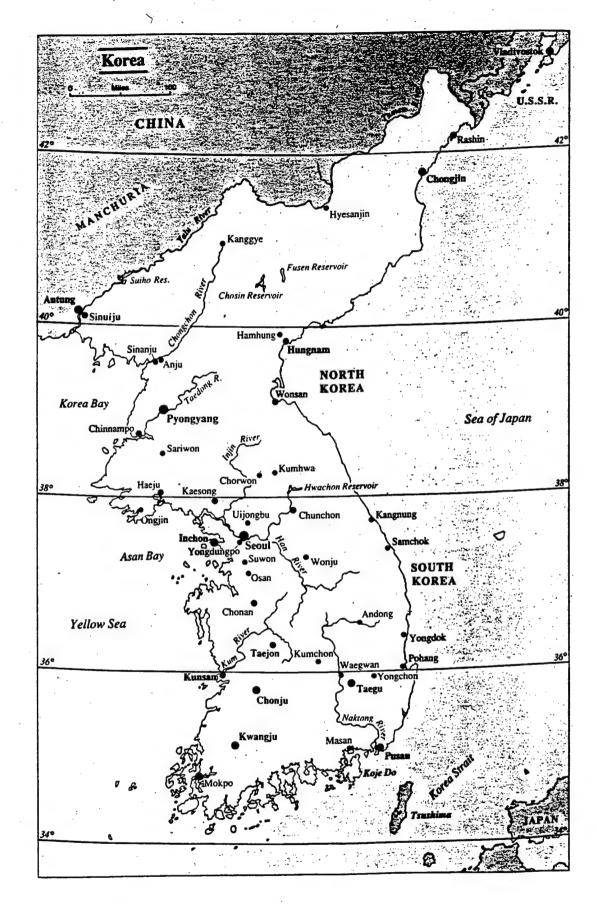
Based on the model developed in this paper, the 2ID is capable of generating the effects required for the conduct of decisive operations in the Korean theater. Their ability to simultaneously dominate the high ground and conduct heavy operations in the decisive valleys is superior to the ability of a standard heavy or light division to do the same. This is a function of its unique heavy light maneuver organization which seems to be the best compromise for a singular division deployed in the Korean theater.

However, limitations imposed by dependence on rotary wing aircraft and the mobility of the division's MSB make several observations necessary. Fair flying weather is necessary if the division is to generate the maximum amount of combat power. If time is severely restricted, the inability of the division to lift both air-assault battalions simultaneously could pose serious risk to their ability to quickly dominate the high ground. The fifty percent mobility of the MSB restricts the divisions ability to exploit deeper than their ability to hold their own lines of communications.

These limitations most strongly affect the ability of the division to conduct an exploitation. It also affects their ability to conduct a penetration, as the air-assault battalions would be forced to conduct infiltration of the high ground to secure the penetration zone. Least affected is the mission to defeat a penetrating force.

The maneuver organization of the 2ID appears sufficient for its purpose. However, to mitigate the risks discussed above, the following changes to the structure of the 2ID are recommended: 1) The addition of a second UH-60 lift battalion to the aviation brigade will allow simultaneous lift of both air-assault battalions. 2) If deep exploitation is a required mission, additional wheeled assets must be assigned to the MSB, making the division is 100 percent mobile. Bad weather has no solution, it must go under the heading of the commander's assessment of what is acceptable and unacceptable risk.

The future organization of the 2ID will depend on its future mission, the terrain, and the enemy against which it is arrayed. It is key to recognize that the 2ID's current organization is a deliberate tailoring for a specific mission as a singular forward deployed division. As such, its capability to conduct decisive operations on different terrain, against a different enemy would likely call for a different organization. Great care must be taken in drawing conclusions from this monograph that might adversely impact the efficiency of the standard U.S. heavy or light division.



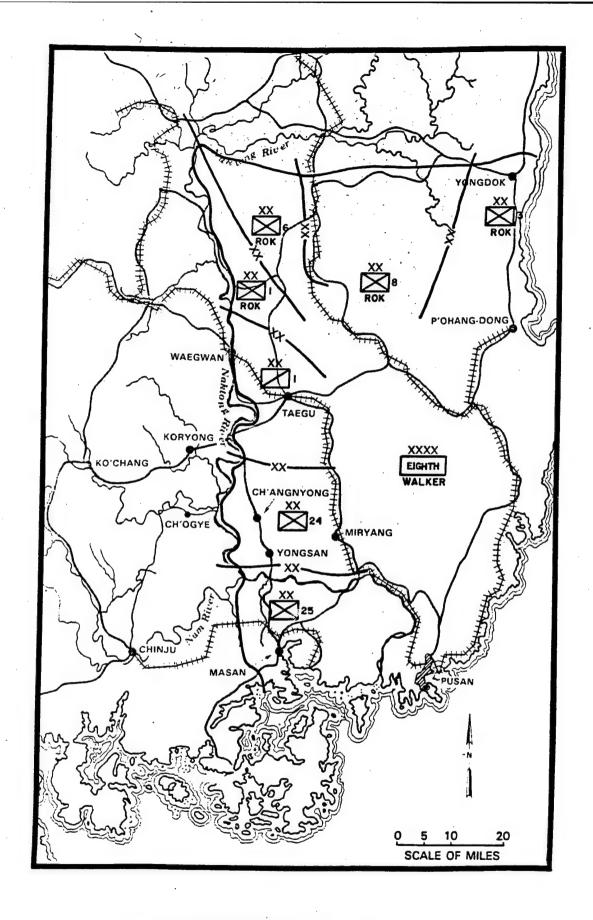
MAP A, THE KOREAN PENINSULA

(from Blair, The Forgotten War, preface)



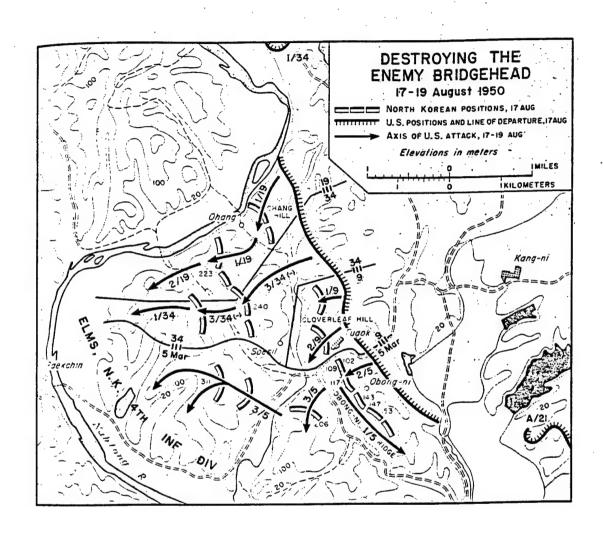
MAP B, NkPA CORPS ZONES

(from DA Pam 550-81, North Korea: A Country Study, p 222)



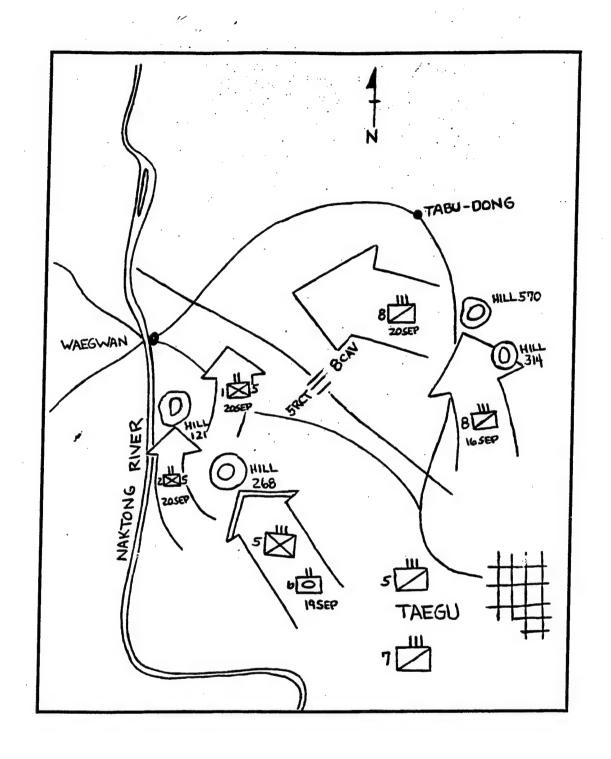
MAP C, THE PUSAN PERIMETER

(from Robertson, Counterattack on the Naktong, map 2)



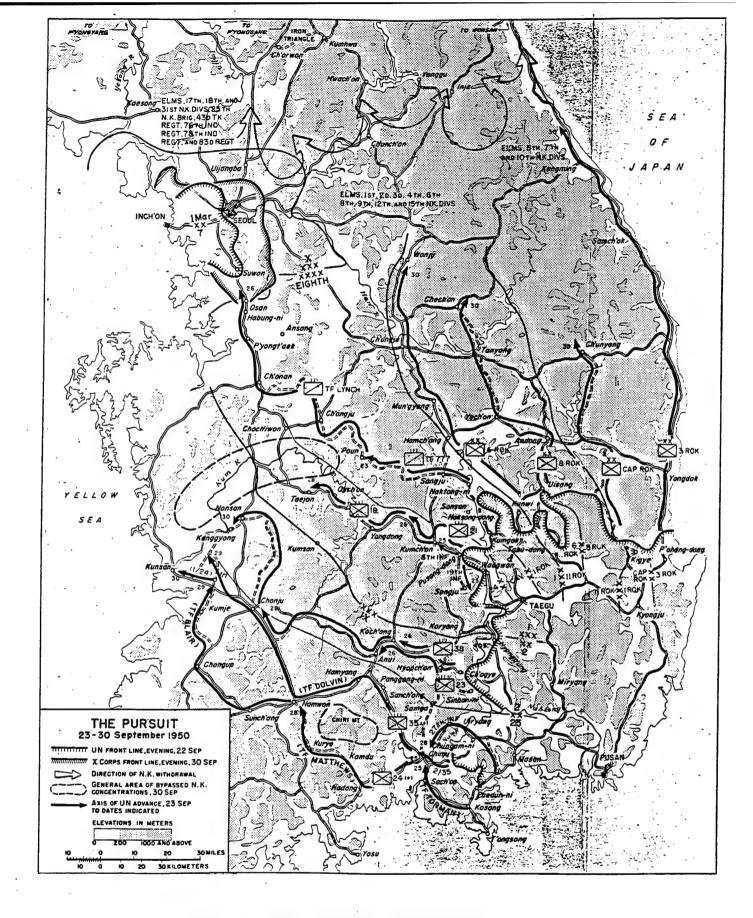
MAP D, BATTLE OF THE NAKTONG BULGE

(From Appleman, <u>U.S. Army in the Korean War</u>, p 311)



MAP E, PENETRATION BY THE 1ST CAVALRY DIVISION

(from 1st Cavalry Division, Korea, p 46)



MAP F, EUSA PURSUIT OPERATIONS

(from Appleman, U.S. Army in the Korean War, Map VIII)

ENDNOTES

¹ Tilelli, John H. Jr. "Korea: Deterring War and Defending Freedom." Army. (Vol 46, No 10)(October 1996), p 79.

² Michaelis, John H. "Korea: The Nixon Doctrine at Work." <u>Army</u>. (Vol 21, No 10) (October 1971), p 66. The 2ID had been assigned to the EUSA since 1966. Along with the 7th Infantry Division (7ID), they comprised the I US Corps. Originally a straight infantry division, the 2ID became a force of four infantry battalions, two mechanized infantry battalions, and two armor battalions in 1971. This reorganization was meant to meant to mitigate the loss of the 7ID.

³ Field Manual 71-100, <u>Division Operations</u>. (Washington, D.C.: HQ, Department of the Army, 28 Aug 1996), p 1-1 to 1-2.

⁴ Tilelli, John H. Jr., p 82.

⁵ RisCassi, Robert W. "Shifts and Disparities in the Two Koreas." <u>Army</u>, (Vol 41, no 10)(October 1991), p 120.

⁶ <u>Handbook on the North Korean Doctrine, Strategy, Operational Art, Tactics, Organization, and Equipment.</u> (Battle Command Training Program, World Class OPFOR, Fort Leavenworth, Kans.: Combined Arms Center, April 1992), p 4-1

⁷ Ibid. p 3-1.

⁸ Ibid. p 3-1 to 3-2. The tactical exploitation corps are under corps control for training, as well as combat, purposes. They may be used as corps or separate brigades. The Handbook on the North Korean Doctrine, Strategy, Operational Art, Tactics, Organization, and Equipment states their most likely employment will be as separate brigades under the control of the forward corps.

⁹ Ibid. p 3-2.

¹⁰ Ibid. p 3-1.

¹¹ Field Circular 100-2-99, <u>North Korean People's Army Operations</u>. (Fort Leavenworth, Kans.: US Army Combined Arms Combat Developments Activity Threats Directorate, December 1986), p 3-3.

¹² RisCassi, Robert W. "Unstable North Korea Poses Greater Threat Than Ever". <u>Defense Issues</u>. (Vol 8, no 16)(May 1993), p 4-5.

¹³ Ibid. p 5-6.

- ¹⁵ FM 100-17-1, <u>Army Pre-Positioned Afloat Operations</u>. (Washington, D.C.: HQ, Department of the Army, July 1996), p 1-1 to 1-2. The Army Strategic Mobility Program (ASMP) Action Plan of 2 March 1993 gives the following criteria for the deployment of a Corps sized crisis response force (C day equals day of notification to the corps headquarters):
 - C+4 One light/airborne brigade of a division deployed to theater
 - C+12 Remaining two brigades of the above division closed in theater
 - C+15 Afloat heavy combat brigade in theater and prepared for combat
 - C+30 Two heavy divisions, with support, closed on theater
 - C+75 Remaining force of two divisions, with support, closed on theater

- ¹⁷ Field Manual 100-5, <u>Operations</u>. (Washington, D.C.: HQ, Department of the Army, 1993), p 7-0.
- ¹⁸ Field Manual 100-5, <u>Operations Final Draft</u>. (Washington, D.C.: HQ, Department of the Army, Aug 1997), p 3-1.
- ¹⁹ Fuller, J. F. C. <u>The Foundations of the Science of War</u>. (London: Hutchinson & Co. (*Publishers*), LTD. Paternoster Row, E.C)(A Military Classic Reprint U.S. Army Command and General Staff College Press, Fort Leavenworth, Kans., 1993), p 108.
- ²⁰ Schneider, James J. <u>The Theory of Operational Art.</u> (U.S. Command and General Staff College, Fort Leavenworth, Kans., 1 March 1988), p 14.
- ²¹ Clausewitz, Carl von. <u>On War</u>. (Edited and Translated by Michael Howard and Peter Paret. Princeton University Press, Princeton, N.J., 1976), p 227.

Heritage Foundation, "The Folly of Clinton's Defense Plans for Korea," Backgrounder (No 28)(Washington, D.C.: The Heritage Foundation, Jun 28, 1994), p 2.

¹⁶ McCallister, William S. "Combined Operations in Korea Test U.S. Contingency Plans". <u>International Defense Review</u>. (Vol 27, no 8)(Aug '94), p 67.

²² Ibid. p 231-232.

²³ Ibid. p 233-234.

²⁴ Ibid. p 261.

- Jomini, Antoine Henry. <u>The Art of War</u>. (Stackpole Books, Harrisburg, Pa., 1992), p 178.
- ³¹ Ibid. p 178-179. Jomini mentions the battle of Zama, where Hannibal was decisively defeated by Scipio without a turning movement, at Rivoli, the turning party was completely beaten and the maneuver was unsuccessful at both Stockach and Austerlitz.
- ³² Ibid. p 241-242. The bridge of gold is not only an old Roman proverb as mentioned by Jomini, but is also a concept mentioned by Sun-Tzu, who believed that a cornered enemy was too dangerous to engage, therefore an escape route should always be left a retreating army. Jomini disliked the concept of the bridge of gold as it allowed the enemy to escape, this is in direct conflict with the Napoleonic ideal of the battle of annihilation.
- ³³ Ibid. p 304. Speaking of ratios of cavalry to infantry Jomini says, "As a general rule, it may be stated that an army in open country should contain enough cavalry to the amount of one-sixth its whole strength; in mountainous countries one-tenth will suffice".

²⁵ Ibid. p 263-270.

²⁶ Ibid. p 264.

²⁷ Ibid. p 285.

²⁸ Ibid. p 251.

²⁹ Ibid. p 287, 290, 291.

³⁴ **Ibid**. p 290.

³⁵ Ibid. p 70.

³⁶ Fuller, <u>Foundations</u>, p 108.

³⁷ Ibid. p 109-110.

³⁸ **Ibid.** p 84 and 85.

³⁹ Schneider, <u>The Theory of Operational Art</u>, p 11-12.

⁴⁰ Ibid. p 32.

Appleman, Roy E. <u>U.S. Army in the Korean War South to the Naktong, North to the Yalu (June - November 1950).</u> (Center of Military History, United States Army, Washington D.C., 1986), p 289.

Robertson, William Glenn. <u>Counterattack on the Naktong, 1950</u>, (Leavenworth Papers, Combat Studies Institute, U.S. Army Command and General Staff College, Fort Leavenworth, Kans., December 1986), p 4, 14.

⁴³ Ibid. p 15.

⁴⁴ Blair, Clay. <u>The Forgotten War: America in Korea 1950-1953</u>. (New York: Doubleday, 1987), p 198.

⁴⁵ Appleman, <u>U.S. Army in the Korean War</u>, p 289.

Hoyt, Edwin P. <u>The Pusan Perimeter</u>. (Stein and Day/Publishers/New York)(1984), p 256.

⁴⁷ Appleman, <u>U.S. Army in the Korean War</u>, p 290-291.

⁴⁸ Ibid.

⁴⁹ Ibid. p 293.

⁵⁰ Ibid. p 297-298.

⁵¹ Ibid. p 299.

⁵² Ibid. p 301.

⁵³ Ibid. p 301-302.

⁵⁴ Ibid. p 302.

⁵⁵ Ibid. p 303-304.

⁵⁶ Ibid. p 307-308.

⁵⁷ Robertson, Counterattack on the Naktong, p 86.

⁵⁸ Appleman, <u>U.S. Army in the Korean War</u>, p 309.

⁵⁹ Ibid. p 310.

⁶⁰ **Ibid.** p 311.

⁶¹ Ibid. p 314-315.

⁶² Ibid. p 314.

⁶³ Ibid. p 316-317.

⁶⁴ Hoyt, <u>The Pusan Perimeter</u>, p 283.

⁶⁵ Appleman, <u>U.S. Army in the Korean War</u>, p 290.

⁶⁶ U.S. doctrine gives a defending unit a fifty percent chance of success in the defense if they gain a force ratio of 1:3. An attacking unit has a fifty percent chance of success if they gain a 3:1 advantage. It is a commander's responsibility to ensure that he arrays his units so as to gain the most favorable force ratio a possible.

⁶⁷ 1st Cavalry Division, <u>Korea, June 1950 to January 1952</u>. (Turner Publishing Company, Paducah, Ky.,1994), p 44.

Alexander, Bevin. <u>Korea the First War We Lost</u>. (Hippocrene Books, New York, 1986), p 219.

⁶⁹ Ibid. p 44-45.

Appleman, Roy E. <u>U.S. Army in the Korean War South to the Naktong, North to the Yalu (June - November 1950).</u> (Center of Military History, United States Army, Washington D.C., 1986), p 553; and U.S. Army Armor School, <u>Employment of Armor in Korea - the First Year. Vol 1</u>. (Fort Knox Ky., May 1952), p 34 and 78.

⁷¹ Appleman, <u>U.S. Army in the Korean War</u>, p 553.

⁷² Ibid. p 552-553.

⁷³ 1st Cavalry Division, Korea, p 46.

⁷⁴ Ibid. p 552.

⁷⁵ Ibid. p 553.

⁷⁶ Ibid.

- ⁷⁹ Appleman, <u>U.S. Army in the Korean War</u>, p 588.
- ⁸⁰ Blair, <u>The Forgotten War</u>, p 312.
- ⁸¹ Ibid. p 313.
- ⁸² 1st Cavalry Division, Korea, p 53-54.
- ⁸³ Blair, The Forgotten War, p 314.
- ⁸⁴ Appleman, <u>U.S. Army in the Korean War</u>, p 592.
- ⁸⁵ Ibid. p 592-593.
- ⁸⁶ Ibid. p 593.
- ⁸⁷ Blair, <u>The Forgotten War</u>, p 315.
- ⁸⁸ Appleman, <u>U.S. Army in the Korean War</u>, p 594.
- ⁸⁹ Alexander, Korea: The First War We Lost, p 223-224.
- ⁹⁰ Appleman, <u>U.S. Army in the Korean War</u>, p 595-597.
- ⁹¹ 1st Cavalry Division, Korea, p 61.
- ⁹² Appleman, <u>U.S. Army in the Korean War</u>, p 597.
- ⁹³ Blair, <u>The Forgotten War</u>, p 316.
- ⁹⁴ Ibid. p 319.
- ⁹⁵ FM 100-5, Operations, p 7-9.
- ⁹⁶ FM 90-6, <u>Mountain Operations Final Draft</u>. (Washington, D.C.: HQ, Department of the Army, Aug 1997), p v.
- ⁹⁷ U.S. Army Armor School, <u>Employment of Armor in Korea the First Year. Vol 1</u>. (Fort Knox, Ky., May 1952), p 6-9.

⁷⁷ Appleman, <u>U.S. Army in the Korean War</u>, p 554.

Leckie, Robert. Conflict, The History of the Korean War, 1950-53. (G.P. Putnam's Sons, New York, 1962). p 146.

⁹⁸ Fehrenbach, T. R. <u>This Kind of War a Study in Unpreparedness</u>. (The MacMillan Company, New York, NY, Reprinted by U.S. Army Command and General Staff College, Fort Leavenworth, Kans., 1963), p 290-292.

⁹⁹ Jomini, <u>The Art of War</u>, p 162-167.

¹⁰⁰ FM 90-6, <u>Mountain Operations</u>, p 3-24.

By the Tables of Organization and Equipment (TO&E), an M2 equipped infantry battalion at 100 percent strength can dismount 216 infantry soldiers.

¹⁰² FM 71-100, <u>Division Operations</u>, p. B-1.

¹⁰³ Ibid. p.1-4 to 1-8.

¹⁰⁴ FM 90-6, <u>Mountain Operations</u>, p 3-35.

This effect is defined in FM 90-6, "Airmobile and attack helicopter units can be used to augment and support exploitation operations."

Bibliography

Government Publications

- Department of Defense, "Strategic Framework for the Asian Pacific Rim: Looking Toward the 21st Century" report to Congress, April 1990, interim report, Nov 30, 1990 (p. 841-869).
- DA Pam 550-41, <u>South Korea: A Country Study</u>. Federal Research Division, Library of Congress. Edited by Andrea Matles Savada, Research completed June 1990.
- DA Pam 550-81, North Korea: A Country Study. Federal Research Division, Library of Congress. Edited by Andrea Matles Savada, Research completed June 1993.
- Employment of Armor in Korea--The First Year, Volume I. A research report prepared at the Armored School, Fort Knox, Ky., May 1952.
- Field Circular 100-2-99, North Korean People's Army Operations (NKPA). Washington, D.C.: HQ, Department of the Army, December 1986.
- Field Manual 90-6, <u>Mountain Operations Final Draft</u>. Washington D.C.: HQ, Department of the Army, November 1996.
- Field Manual 71-100, <u>Division Operations</u>. Washington D.C.: HQ, Department of the Army, Aug 1996.
- Field Manual 100-5, <u>Operations</u>. Washington, D.C.: HQ, Department of the Army, Aug 1993.
- Field Manual 100-5, <u>Operations Final Draft</u>. Washington, D.C.: HQ, Department of the Army, Aug 1997.
- FM 100-17-1, <u>Army Pre-Positioned Afloat Operations</u>, Washington DC.: HQ Department of the Army, July 1996.
- Handbook on North Korean Doctrine, Strategy, Operational Art, Tactics,
 Organization, and Equipment. Battle Command Training Program, World
 Class OPFOR, Fort Leavenworth, Kans: Combined Arms Center, April
 1992.
- National Military Strategy of the United States of America. Shape, Respond,
 Prepare Now: A Military Strategy for a New Era. September 1997.

Books:

- Alexander, Bevin. <u>Korea: The First War We Lost</u>. New York: Hippocrene Books, 1986.
- Appleman, Roy E. <u>U.S. Army in the Korean War South to the Naktong, North to the Yalu (June November 1950).</u> Center of Military History, United States Army, Washington D.C., 1986.
- Blair, Clay. <u>The Forgotten War Armerica in Korea 1950-1953</u>. New York: Doubleday, 1987.
- Clausewitz, Carl Von. On War. Edited and Translated by Michael Howard and Peter Paret. Princeton University Press, Princeton, N.J., 1976.
- Fehrenbach, T.R. <u>This Kind of War A Study in Unpreparedness</u>. New York: Macmillan Press, 1963.
- 1st Cavalry Division, <u>Korea, June 1950 to January 1952</u>. Turner Publishing Company, Paducah, Ky., 1994.
- Fuller, J.F.C. <u>The Foundations of the Science of War</u>. A Military Classic Reprint, U.S. Army Command and General Staff College Press, Fort Leavenworth, Kans., 1993.
- Gugler, Russell. <u>Combat Actions in Korea</u>. Washington, D.C.: Office of the Chief of Military History, U.S. Army, 1970.
- Hoyt, Edwin P. <u>The Pusan Perimeter</u>. Stein and Day, New York, September 1985.
- Jomini, Antoine Henry. The Art of War, Stackpole Books, Harrisburg, Pa., 1987.
- Leckie, Robert. Conflict The History of the Korean War, 1950-53. G.P. Putnam's Sons, New York, 1962.
- Mossman, Billy C. <u>Ebb and Flow: November 1950-July 1951 United States</u>
 <u>Army in the Korean War</u>. Washington, D.C.: Center of Military History, U.S. Army, 1990.
- Robertson, William Glenn. <u>Counterattack on the Naktong, 1950</u>. Leavenworth Paper No. 13. Combat Studies Institute. U.S. Army Command and General Staff College, Fort Leavenworth, Kans., December 1985.

- Sun Tzu. <u>The Art of War</u>. Westview Press, Boulder, San Francisco, Oxford, 1994, translated by Ralph D. Sawyer.
- Toland, John. <u>In Mortal Combat Korea, 1950-1953</u>. Quill William Morrow, New York, 1991.
- Ward, Orlando. <u>Korea--1950</u>. Office of The Chief of Military History, Department of the Army, Washington, D.C., 1952.

Journal and Magazine Articles:

- Connor, Arthor W. Jr. "Armor Debacle in Korea, 1950," <u>Parameters</u>. (Vol 22, no 2)(Summer 1992): 66-76.
- Heritage Foundation, "The Folly of Clinton's Defense Plans for Korea,"

 <u>Backgrounder</u> (No 28)(Washington: The Heritage Foundation, June 28 1994).
- Luck, Gary E. "Last Outpost of the Cold War." Army. (Vol 44, no 10)(Oct 1994): 85-89.
- Luck, Gary E. "Vigilance on Freedom's Frontier To Counter the 'Face of Uncertainty'." Army. (Vol 45, no 10)(Oct 1995): 77-83.
- McCallister, William S. "Combined Operations in Korea Test US Contingency Plans." <u>International Defense Review</u>. (Vol 27, no 8)(August 1994): 65-67.
- Michaelis, John H. "Korea: The Nixon Doctrine at Work." <u>Army</u>. (Vol 21, no 10) (October 1971): 64-70.
- Pickett, George B. "Tanks in Korea." <u>Armor</u>. (Vol LX no 6)(November-December 1951): 12-16.
- RisCassi, Robert W. "Shifts and Disparities In The Two Koreas." Army. (Vol 41, no 10)(October 1991): 118-124.
- RisCassi, Robert W. "No Letting Down Guard at Cold War's Last Wall." <u>Army</u>. (Vol 42, no 10)(October 1992): 104-110.
- RisCassi, Robert W. Prepared Statement, "Unstable North Korea Poses Greater Threat Than Ever". <u>Defense Issues</u>. (Vol 8, no 16)(May 1993).
- Telelli, John H. Jr. "Korea: Deterring War and Defending Freedom." Army. (Vol 46, no 10)(October 1996): 79-86.

Unpublished Dissertations, Theses, and Papers

- Schneider, James J. "The Theory of Operational Art." School of Advanced Military Studies, Theoretical Paper No. 3. Command and General Staff College, Ft. Leavenworth, Kans., 1 March 1988.
- Schneider, James J. "Vulcan's Anvil: The American Civil War and the Emergence of Operational Art." School of Advanced Military Studies, Theoretical Paper No. 4. Command and General Staff College, Ft. Leavenworth, Kans., 16 June 1991.